

5. The apparatus of Claim 1, wherein the shape of one or more of said multiple fins is ~~plano-triangular~~.
6. The apparatus of Claim 3, wherein the protruding base extension further includes at least one linear fin.

8. A total shoulder arthroplasty apparatus for recreating an anatomic proximal humeral configuration, comprising:

a stemless humeral head for coupling to a previously cut humeral surface, wherein the humeral head includes a base having a non stem-bearing stabilizing base extension including multiple fins protruding therefrom for impaction into a cancellous region of the cut humeral surface.

16. A total shoulder arthroplasty apparatus for recreating an anatomic proximal humeral configuration, comprising:

a stemless humeral head for coupling to a cut humeral surface, wherein the humeral head includes a base having a rotationally-stabilizing base extension protruding therefrom including multiple fins for impaction into a cancellous, non-intramedullary region of the cut humeral surface.

23. A total shoulder arthroplasty apparatus for recreating an anatomic proximal humeral configuration, comprising:

a humeral head for coupling to a cut humeral surface, wherein the humeral head includes a base having a rotationally-stabilizing base extension protruding therefrom including multiple fins for impaction into a cancellous region of the cut humeral surface, and wherein the base extension is confined to protrude only into a ball region of the humerus, to which the humeral head couples, and which is above an elongate region of the humerus.

24. A total shoulder arthroplasty apparatus for recreating an anatomic proximal humeral configuration, comprising:

a humeral head for coupling to a cut humeral surface, wherein the humeral head includes a base having a rotationally-stabilizing base extension protruding therefrom including multiple fins for impaction into a cancellous region of the cut humeral surface,

and wherein the extension is nonintrusive of an elongate humeral region below a humeral ball region including the humeral head.

25. A total shoulder arthroplasty method for recreating an anatomic proximal humeral configuration, comprising the steps of:

preparing a stemless humeral head having a base including a stabilizing base extension including multiple fins for efficient rotational stabilization of the humeral head on a cut humeral surface for coupling with the cut humeral surface;

preparing a humeral surface for coupling the humeral head thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the humeral head to the humeral surface, thereby recreating the anatomic proximal humeral configuration.

a⁷
a⁸
a⁹
27. The method of Claim 26, wherein one or more of said multiple fins are substantially planar in shape.

31. A total shoulder arthroplasty method for recreating an anatomic proximal humeral configuration, comprising the steps of:

preparing a stemless humeral head having a base including a non stem-bearing stabilizing base extension including multiple fins for rotational stabilization of the humeral head on a cut humeral surface for coupling to the cut humeral surface;

preparing a humeral surface for coupling the humeral head thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the humeral head to the humeral surface, thereby recreating the anatomic proximal humeral configuration.

42. A total shoulder arthroplasty method for recreating an anatomic proximal humeral configuration, comprising the steps of:

preparing a stemless humeral head having a base including a non stem-bearing stabilizing base extension including multiple fins for rotational stabilization of the humeral head on a cut humeral surface for coupling to the cut humeral surface;

preparing a humeral surface for coupling the humeral head thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the humeral head to the humeral surface, thereby recreating the anatomic proximal humeral configuration, including impacting the base extension of the humeral head to protrude only into a ball region of the humerus above an elongate region of the humerus.

43. A total shoulder arthroplasty method for recreating an anatomic proximal humeral configuration, comprising the steps of:

preparing a stemless humeral head having a base including a non stem-bearing stabilizing base extension including multiple fins for rotational stabilization of the humeral head on a cut humeral surface for coupling to the cut humeral surface;

preparing a humeral surface for coupling the humeral head thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the humeral head to the humeral surface, thereby recreating the anatomic proximal humeral configuration, including impacting the base extension of the humeral head nonintrusive to an elongate region of the humerus below a ball region of the humerus.

50. A total shoulder arthroplasty method for recreating an anatomic proximal humeral configuration, comprising the steps of:

preparing a stemless humeral head having a base including a non stem-bearing stabilizing base extension including multiple fins for rotational stabilization of the humeral head on a cut humeral surface for coupling to the cut humeral surface;

preparing a humeral surface for coupling the humeral head thereto, including cutting the humeral surface to reveal a cancellous interior; and

coupling the humeral head to the humeral surface, thereby recreating the anatomic proximal humeral configuration.

Respectfully submitted,
Sierra Patent Group, Ltd.

Dated: 11-5-01

Sierra Patent Group, Ltd.
P.O. Box 6149
Stateline, NV 89449
(775) 586-9500

Andrew V. Smith
Reg. No. 43,132